

WHAT IS CLAIMED IS:

1. A lithographic projection apparatus, comprising:
 - a radiation system configured to provide a projection beam of radiation, the projection beam being patterned by a patterning device;
 - a substrate table configured to hold a substrate;
 - a projection system configured to project the patterned beam onto a target portion of the substrate;
 - a processing unit configured to process the substrate at least one of before and after the substrate has been exposed to the projection beam;
 - a transport unit configured to transport the substrate between the substrate table and the processing unit; and
 - a contamination control device configured to control the partial pressure of H_2O in the transport unit to be less than 1×10^{-2} mbar, the partial pressure of hydrocarbons in the transport unit to be less than 1×10^{-4} mbar, and the partial pressure of amine bases in the transport unit to be less than 1×10^{-6} mbar.
2. A lithographic projection apparatus according to claim 1, wherein the contamination control device is configured to control the partial pressure of contaminants in the transport unit to be less than 1 mbar.
3. A lithographic projection apparatus according to claim 1, wherein contamination control device is configured to control the partial pressure of H_2O in the transport unit to be less than 1×10^{-5} mbar, the partial pressure of hydrocarbons in the transport unit to be less than 1×10^{-7} mbar, and the partial pressure of amine bases in the transport unit to be less than 1×10^{-7} mbar.
4. A lithographic projection apparatus according to claim 1, wherein the contamination control device substantially evacuates the transport unit.
5. A lithographic projection apparatus according to claim 4, wherein at least one of a space surrounding the substrate table and a space surrounding the processing unit is substantially evacuated.
6. A lithographic projection apparatus according to claim 1, wherein the contamination control device comprises a gas supply configured to supply a substantially contaminant-free gas to fill the transport unit.
7. A lithographic projection apparatus according to claim 6, wherein the substantially contaminant-free gas is one of substantially pure nitrogen and synthetic air.

8. A lithographic projection apparatus according to claim 1, wherein the projection beam of radiation is EUV radiation.
9. A lithographic projection apparatus according to claim 1, wherein the processing unit is configured to at least one of:
 - apply a layer of resist to the substrate;
 - bake the substrate to process the resist;
 - cool the substrate after it has been baked; and
 - develop the substrate with the resist.
10. A lithographic projection apparatus according to claim 1, wherein the transport unit is configured to at least one of:
 - bake the substrate to process the resist; and
 - cool the substrate after it has been baked.
11. A device manufacturing method, comprising:
 - providing a substrate that is at least partially covered by a layer of radiation-sensitive material;
 - projecting a patterned beam of radiation onto a target portion of the layer of radiation-sensitive material; and
 - transporting the substrate in a transport unit between a substrate table and a processing unit configured to process the substrate at least one of before and after it has been exposed by the patterned beam of radiation, wherein a partial pressure of H₂O in the transport unit is less than 1×10^{-2} mbar, a partial pressure of hydrocarbons in the transport unit is less than 1×10^{-4} mbar, and a partial pressure of amine bases in the transport unit is less than 1×10^{-6} mbar.
12. A device manufacturing method according to claim 11, wherein a partial pressure of contaminants in the transport unit is less than 1 mbar.
13. A device manufacturing method according to claim 11, the partial pressure of H₂O in the transport unit is less than 1×10^{-5} mbar, the partial pressure of hydrocarbons in the transport unit is less than 1×10^{-7} mbar, and the partial pressure of amine bases in the transport unit is less than 1×10^{-7} mbar.
14. A device manufacturing method according to claim 11, further comprising substantially evacuating the transport unit.
15. A device manufacturing method according to claim 11, further comprising filling the transport unit with a substantially contaminant-free gas.

16. A device manufacturing method according to claim 15, wherein the substantially contaminant-free gas is one of substantially pure nitrogen and synthetic air.
17. A device manufacturing method according to claim 11, further comprising at least one of:
 - applying a layer of resist to the substrate;
 - baking the substrate to process the resist;
 - cooling the substrate after it has been baked; and
 - developing the substrate with the resist.
18. A device manufacturing method according to claim 11, wherein the projection beam of radiation is EUV radiation.
19. A device manufactured by the method of claim 11.